

Michel



Linda S. Adams  
Secretary for  
Environmental Protection

## Department of Toxic Substances Control

Maureen F. Gorsen, Director  
1011 North Grandview Avenue  
Glendale, California 91201



Arnold Schwarzenegger  
Governor

### CERTIFIED MAIL

May 21, 2007

Mr. Michael Farley  
Jervis Webb of California  
34375 West Twelve Mile Road  
Farmington Hills, Michigan 48331

Mr. Jose Ramirez

**Privacy Act**

Mr. Jeffrey Palmer  
9301 Rayo Avenue  
South Gate, California 90280

CONSENT ORDER FOR JERVIS B. WEBB OF CALIFORNIA SITE, 5030 FIRESTONE BOULEVARD AND 9301 RAYO AVENUE, SOUTH GATE, CALIFORNIA

Dear Sirs:

The California Regional Water Quality Control Board – Los Angeles Region transferred the Jervis B. Webb of California site (Site) to the Department of Toxic Substances Control (DTSC) to assume lead oversight responsibilities. DTSC has determined that there has been a release of hazardous substances at the Site. The Site is located at 5030 Firestone Boulevard (Webb-Firestone property) and 9301 Rayo Avenue (Webb-Ray property), in the City of South Gate.

Pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code (Chapter 6.8), you have been identified as potentially responsible parties (PRPs) for the Site.

DTSC requests that you enter into the attached Consent Order for the Site. DTSC is willing to meet with you in order to facilitate communication amongst the PRPs and discussions regarding finalizing the Consent Order. If you wish to request such a meeting, please notify DTSC immediately to determine a meeting date and time that will work for all parties. If a Consent Order has not been finalized and executed within forty-five (45) days from the date of this letter, DTSC intends to issue a unilateral order under

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Mr. Jose Ramirez  
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its authority in Chapter 6.8 to ensure that appropriate response actions are taken at the Site to protect human health and the environment.

If you have any questions regarding this letter or wish to schedule a meeting, please contact Mr. Michel Iskarous, Project Manager, at (818) 551-2857 or me, at (818) 551-2822.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sayareh Amir". The signature is fluid and cursive, with the first name "Sayareh" written in a larger, more prominent script than the last name "Amir".

Sayareh Amir, Chief  
Southern California Cleanup Operations Branch – Glendale Office

**CERTIFIED MAIL**  
**7006 2760 0002 9347 5305**  
**Return Receipt Requested**

Enclosure

Mr. Michael Farley  
Mr. Jose Ramirez  
Mr. Jeffrey Palmer  
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bcc: Robert L. Elliott  
DTSC Staff Counsel  
Office of Legal Affairs, Sacramento

STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:	)	Docket No. _____
	)	
Jervis B. Webb of California	)	IMMINENT AND SUBSTANTIAL
5030 Firestone Boulevard	)	ENDANGERMENT
South Gate, California 90280	)	DETERMINATION AND CONSENT ORDER

Respondents:

Jervis B. Webb Company	)	Health and Safety Code
34375 West Twelve Mile Road	)	Sections 25355.5(a)(1)(B) and (C),
Farmington Hills, Michigan 48331	)	25358.3(a), 58009 and 58010

Jose Ramirez )

**Privacy Act**

Jeffrey Palmer )  
9301 Rayo Ave )  
South Gate, California 90280

I. INTRODUCTION

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and Jervis B. Webb Company, a Michigan company registered in California (Webb of California); Mr. Jose Ramirez, an individual; and Mr. Jeffrey Palmer, an individual (Respondents) hereby enter into this Consent Order (Order) and agree to its terms and conditions. DTSC and Respondents are referred to collectively herein as the Parties.

1.2 Property/Site. This Order applies to the properties located at 5030 Firestone Boulevard (Webb-Firestone) and 9301 Rayo Avenue (Webb-Ray), South Gate, California. The Webb-Firestone property and the Webb-Ray property (collectively hereinafter called "the Property") are located adjacent to one another. The Webb-Firestone property consists of approximately 1.4 acres and comprises the northwestern portion of the Property. The Webb-Ray property, which was sold to Reliable Steel in 1997, occupies about 2.8 acres and comprises the southeastern portion of the Property. The Property is bordered to the north by Firestone Boulevard, Rayo Avenue to the south-southeast, a 50-foot wide Union Pacific Railroad (UPR)



easement to the west, and the Piazza Trucking operation to the east. A 35-foot wide Los Angeles County Flood Control easement, containing a large underground storm drain, extends along the entire western portion of the Property. A five-foot wide rail spur enters the Property from the northwest and extends across the west side. North of Firestone Boulevard are mainly industrial, commercial and manufacturing facilities. South of Rayo Avenue are the UPR tracks; the Purex Rubbish Disposal Company, a solid waste landfill site, located at 9400 South Rayo Avenue; the California Alabama Pipe Company; and the Los Angeles River. East of the Piazza Trucking facility lies the Los Angeles River and the Interstate 710 Freeway. West of the UPR tracks is McLeod Metals at 8980 Kendall Avenue and 9309 Rayo Avenue, and the Cooper Drum Company Superfund Site at 9316 Atlantic Avenue. A location map and diagram of the Property are attached hereto as Exhibit A and Exhibit B, respectively. The Property is also identified by Assessor's Parcel Numbers 6222-005-015 & 6222-005-024. This Order applies to the Property and the areal extent of contamination that resulted from activities on the Property ("Site").

1.3 Jurisdiction. This Order is entered into by the parties pursuant to Health and Safety Code sections 25358.3(a), 25355.5(a)(1)(B) and (C), 58009 and 58010.

Health and Safety Code section 25358.3(a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

Health and Safety Code section 25355.5(a)(1)(B) authorizes DTSC to issue an order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include, but is not limited to requiring specific dates by which the nature and extent of a release shall be determined and the site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

Health and Safety Code section 25355.5(a)(1)(C) authorizes DTSC to enter into an enforceable agreement with a responsible party for the site which requires the party to take necessary corrective action to remove the threat of the release, or to determine the nature and extent of the release and adequately characterize the site, prepare a remedial action plan, and complete the necessary removal or remedial actions, as required in the approved remedial action plan.

Health and Safety Code section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and/or on matters within its jurisdiction, to protect and preserve the public health.

Health and Safety Code section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

## II. FINDINGS OF FACT

DTSC hereby finds:

2.1 Liability of Respondent. Respondents are responsible parties or liable persons as defined in Health and Safety Code section 25323.5.

2.1.1 Webb of California manufactured industrial conveyor systems at the Webb-Rayo property from the middle 1950's to early 1996. The adjacent Webb-Firestone property was purchased by Webb of California in 1975 from Spear Industries.

2.1.2 In March 1997 Mr. Jeffrey Palmer acquired the Webb-Rayo property (9301 Rayo Ave) from the Jervis Webb Company of California.

2.1.3 In January 2002, the Webb-Firestone property (5030 Firestone Blvd.) was sold to Mr. Jose Ramirez.

2.2 Physical Description of Site. The Property is a little over 4 acres in size, roughly rectangular in shape, and is oriented approximately northwest to southeast. The Property is comprised of two adjacent parcels of land: the Webb-Firestone property and the Webb-Rayo property. The Webb-Firestone property is approximately 1.4 acres in size and is improved with a 20,000 square-foot steel-framed building with corrugated steel siding. The building is surrounded by asphalt and concrete paving except for a planter on the north side of the building. The Webb-Rayo property is approximately 2.8 acres in size and is improved with a 37,000 square-foot corrugated steel building. A five-foot side rail spur enters the Webb-Rayo property from the northwest and extends across the west side to a 10,000 square-foot, steel-framed open bay located to the south. The Property is situated in an area of relatively low relief and is fairly flat, with elevations ranging from about 107 feet above mean sea level at the northwest property corner to about 104 feet above mean sea level at the southeast property corner. The land surface slopes to the south with a gradient of approximately 12 feet per mile. The Property is located approximately ¼-mile west of the concrete-lined Los Angeles River, which flows due south. The Rio Hondo River flows into the Los Angeles River approximately 1.2 miles south of the Property.

2.3 Site History. Prior to the 1950's, the Property was vacant. By 1953, the Webb-Firestone property was developed with two small buildings, which consisted of the current building configuration. The Webb-Rayo property was developed in 1954 with a large manufacturing building. By 1957, the two small buildings on the Webb-Firestone property were joined by a large addition, consisting of the main manufacturing portion of the current structure. Additional expansion of buildings on both properties had occurred by 1960, with the railroad



spur present by 1966. Few changes to the configuration of the Site have occurred from 1960 to 1992. The Blake Rivet Company (Blake), an aircraft rivet manufacturer, which had been leasing the Webb-Firestone property prior to Webb of California's ownership, continued to lease the property from Webb of California until approximately 1981, when Blake went out of business. Blake used an above-ground anodizer as part of its rivet manufacturing operation. Wastewater from the anodizer was collected in floor trenches and directed to a three-stage concrete-made clarifier. The clarifier was located outside just to the south of the southern wall of the Webb-Firestone property building until it was removed in November 1996. The clarifier reportedly discharged to the local sewer system. After Blake vacated the Webb-Firestone property, Webb of California used the property primarily for storage of metal stock for use in manufacturing at the neighboring Webb-Rayo property.

**2.3.1 Webb-Firestone Property.** Blake used the Webb-Firestone property for the production of aluminum and stainless steel aircraft rivets from the 1950s until approximately 1980. Wastewater Discharge Permit No. 5181 from the City of South Gate indicates that wastewater producing operations were sulfuric acid anodizing, tumbling, and deburring. The raw materials used included sulfuric acid, alkaline caustic, and chromic acid. Approximately 4,000 gallons of wastewater was discharged to the sanitary sewer via a below-ground concrete clarifier from Blake every day. The below-ground clarifier was located outside the southeast corner of the building. The clarifier consisted of three compartments and a sampling box at the point of discharge to the sanitary sewer. The anodizing operation included tanks containing sulfuric acid anodize, dichromate seal, DX-34, CH-90, ETCH, and rinse waters. On May 18, 1979, a Notice of Violation (NOV) was issued to Blake by the Sanitation District of Los Angeles County for heavy metals discharge [total chromium was detected in the discharge wastewater at a concentration of 34 milligrams per liter (mg/L)]. In 1981, Permit No. 5181 was voided because Blake was no longer in business. In 1992, a City of South Gate inspector visited the Site and reported that all equipment and floor drains were removed and the clarifier had been filled with sand and concrete.

In 1998, Erler & Kalinowski, Inc. (EKI) performed a Phase II Soil Investigation of the Webb-Firestone property for Webb of California and noted indications of several below-ground concrete structures at several locations inside the building. These included a concrete-lined sump and a shallow, L-shaped concrete-lined drainage trench along the northeasterly and southeasterly walls bounding the anodizing area. The trench drain was observed by EKI to be partially filled in with sand and gravel. The trench drain slopes towards a drain located at the southwest end of the trench and eventually leads underground to the three-stage clarifier located outside the building. EKI also noted that "rinse tanks" were reportedly located in the southeast corner of the building. Numerous patches on the concrete floor were observed by EKI in this area. West of the rinse tank area was a "concrete pit for furnace and quench tank" (according to the 'Plumbing Plan' for the property obtained by EKI). No pit was observed by EKI in the location indicated on the Plumbing Plan, however a large rectangular concrete patch was observed on the floor in this area. EKI also noted that the concrete floor inside the rest of the building was in poor condition (pitted, etched, broken, and cracked), with some oil stains noted

in former machining areas, and had numerous patches where former structures or improvements may have been located.

In October 1997, Jervis Webb completed 14 soil borings which were sampled to a maximum depth of ten feet below ground surface (bgs) inside and outside the building and to a maximum depth of 20 feet bgs in the vicinity of the clarifier. Volatile organic compounds (VOCs), such as trichloroethylene (TCE) and tetrachloroethylene (PCE), were detected at maximum concentrations of 270 milligrams per kilogram (mg/kg) and 140 mg/kg, respectively, in the general area of the clarifier. Hexavalent chromium was also detected in one boring at a concentration of 0.88 mg/kg. In December 1997, a soil vapor survey was conducted to identify potential areas of VOC contamination. TCE and PCE were detected in soil vapor at maximum concentrations of 25 micrograms per liter ( $\mu\text{g/L}$ ) and 28  $\mu\text{g/L}$ , respectively. In addition, five deep soil borings, drilled to depths ranging between 46.5 and 62.5 feet bgs, were completed at the property to determine the vertical impact of VOCs in soil beneath the clarifier and anodizing areas. Elevated concentrations of TCE and PCE were detected in these soil samples.

In 1998, five groundwater monitoring wells (designated MW-1 to MW-5) were installed on the Property and screened from 40 feet to 70 feet bgs. Groundwater was encountered at approximately 57 feet bgs, with flow direction to the southeast. The highest VOC concentrations in groundwater occurs at monitoring well MW-1, with TCE concentrations ranging from 14,253  $\mu\text{g/L}$  up to 33,000  $\mu\text{g/L}$ , followed by other VOCs [PCE, cis and trans 1,2-dichloroethene (DCE), 1,1-dichloroethane (DCA), 1,2-DCA, 1,1-DCE, acetone, benzene, xylenes, toluene, and methyl-ethyl-ketone (MEK)] detected at lower concentrations. PCE concentrations at monitoring well MW-1 ranged from 48.5  $\mu\text{g/L}$  to approximately 200  $\mu\text{g/L}$ . Well MW-1 is located just downgradient of the former clarifier area located on the Webb-Firestone property, suggesting that contaminants may have been released from the clarifier area to impact groundwater beneath the Site.

In 1999, EKI removed the clarifier from the Webb-Firestone property and excavated an area measuring approximately 15 feet by 11 feet by 8 feet (depth) surrounding the clarifier. The excavated area was backfilled with approximately 47 cubic yards of sand. In June 1999, four soil vapor extraction (SVE) wells and four vapor monitoring probes were installed to extract and treat VOCs in soil vapor beneath the Webb-Firestone property in the vicinity of the former clarifier. The SVE system started operation on March 16, 2000 and ran nearly continuously until October 2001, removing an estimated total of 177 pounds of VOCs (primarily TCE): the estimated total mass of VOCs in soil. In September 2001, Webb of California drilled five soil confirmation borings and analyzed for VOCs and metals. TCE was detected in two of the soil borings at concentrations of 290 micrograms per kilogram ( $\mu\text{g/kg}$ ) and 630  $\mu\text{g/kg}$ . These borings were reamed out using 12-inch diameter hollow-stem-augers in an effort to remove impacted soil. Confirmation samples collected at the bases of these borings indicated the presence of some residual VOCs and metals, including hexavalent chromium and lead. In October 2001, Webb of California submitted a Soil Closure Report requesting no further action (NFA) for the Webb-Firestone property to the Regional Water Quality Control Board (RWQCB)



in an effort to sell the property. In January 2002, the RWQCB concurred with NFA for soil at the property, but with the stipulation that Webb of California continue with groundwater monitoring. Quarterly groundwater monitoring was conducted at the property from March 1998 until June 2001, then reduced to semi-annually until June 2004, when groundwater monitoring activities were terminated. However, groundwater VOC concentrations (as last tested in 2004) were still in exceedance of drinking water MCLs, most notably for TCE and PCE. In 2006, the Webb-Firestone property was sold to Mr. Jose Ramirez.

**2.3.2 Webb-Rayco Property.** Webb of California manufacturing operations were primarily located on the Webb-Rayco property and included metal fabrication (shearing, bending, sawing, machining, welding), and painting operations associated with the manufacture of conveyor systems. Hazardous substances used in the manufacturing process included solvents/thinners ('J209' and 'Solvent Blend'; or mixtures of alcohols, esters, ketones, toluene, xylene, glycol ethers, and petroleum distillates in varying concentrations), and paints. Prior to the mid 1980's, 1,1,1-trichloroethane (1,1,1-TCA) was used by Jervis Webb as a solvent to clean fabricated metal pieces. The 1,1,1-TCA was replaced in the mid 1980's by naphtha petroleum. The waste generated from the cleaning activities was containerized in 55-gallon drums and sent to an off-site treatment facility for disposal. Bechtel Inc. completed a Preliminary Assessment/Site Inspection of the Site in 1994 in which it noted "A former 8,000-gallon paint and water sump used during the wet-painting process." The sump was converted to hold paint filters for a dry-painting booth in the mid-1980s. In November 1996, EKI removed a 6,500 gallon concrete containment structure and a 250 gallon open-bottom sump from the property. No petroleum hydrocarbons, VOCs, or elevated metals were detected in soil samples collected from directly beneath the 6,500 gallon tank. A layer of paint, approximately one to two inches thick, was observed on the gravelly fill soil at the base of the sump. Soil samples collected directly beneath the sump indicated elevated levels of total lead (1,600 mg/kg), with low levels of total chromium (7.4 to 16 mg/kg) and arsenic (1.6 to 3.1 mg/kg). In response, soil was excavated from beneath the sump to a depth of 10 feet bgs for a total of 35 cubic yards removed. Subsequent confirmation soil sampling indicated no detectable levels of lead present. In addition, one cubic yard of oil-stained soil was removed from a 15-foot-long section of an unlined utility trench located near the vicinity of the sump. Elevated concentrations of 1,1-DCA, 1,1,1-TCA, benzene, and toluene were detected in the excavated soil. Confirmation soil samples contained no VOCs but petroleum hydrocarbons of middle to heavy distillates were detected in one sample up to 16,000 mg/kg. In 1996, the Los Angeles County Department of Public Works (LACDPW) issued an NFA letter for the Webb-Rayco property. In 1997, the Webb-Rayco property was sold to the current owner, Reliable Steel, also a metal fabricator.

**2.4 Hazardous Substances Found at the Site.** Pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. section 9602, and Health and Safety Code section 25316, a substance is a "hazardous substance" if it is listed in 40 Code of Federal Regulations (C.F.R.) part 302.4. Various reports and documents indicate that TCE, PCE, DCA and DCE were detected in soil, soil vapor, and ground water at the Site. TCE was detected in groundwater beneath the Site up to a maximum

concentration of 33,000 µg/L. PCE was also detected in groundwater at concentrations around 100 µg/L. Other VOCs frequently detected in groundwater include cis-1,2-DCE, trans-1,2-DCE, 1,1-DCA, and 1,1-DCE. Benzene and toluene were detected but at fewer frequencies than the others. Groundwater sampling results from the most recent Annual Groundwater Sampling Report dated July 22, 2004 from Brown and Caldwell, Inc., show high concentrations of TCE, PCE, DCA and DCE at various locations, with the highest concentration of TCE at 17,864 µg/L (monitoring well MW-1), PCE at 98.5 µg/L, cis-1,2-DCE at 740.2 µg/L, and trans-1,2-DCE at 104.2 µg/L. Heavy metals, including hazardous metals (such as cadmium, lead, mercury, and hexavalent chromium - which were identified as being present in soils sampled at the Site), were never analyzed in groundwater during the six years of continuous monitoring of the Site wells, therefore it is unknown if these hazardous metals exist there in groundwater.

2.5 Health Effects. There are hazardous substances identified at the site that are carcinogenic and/or toxic at certain dosage and exposure. Potential health effects, if any, will be determined during the health risk assessment after completion of the Remedial Investigation.

2.5.1 PCE. PCE is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Short-term exposure to PCE through ingestion and inhalation may cause nausea, vomiting, headache, dizziness, drowsiness, and tremors. Skin contact with PCE causes irritation and blistering. Liver and kidney toxicity are long-term effects.

2.5.2 TCE. TCE is listed as a chemical known to the State to cause cancer pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986. Acute exposure to TCE causes headaches, dizziness, vertigo, tremors, irregular heartbeat, fatigue, nausea, vomiting, and blurred vision. TCE vapors may cause irritation of the eyes, nose and throat. Long-term effects may include liver and kidney damage.

2.5.3 Cis-1,2-DCE. 1,2-DCE has anesthetic properties at high concentrations. Humans inhaling high concentrations of the compound may display symptoms of nausea, vomiting, weakness, tremor and cramps, followed by unconsciousness.

2.5.4 1,2-DCA. EPA has found 1,2-DCA to potentially cause the following health effects when people are exposed to it at levels above the MCL for relatively short periods of time: central nervous system disorders, and adverse lung, kidney, liver circulatory and gastrointestinal effects. 1,2-DCA has the potential to cause cancer from a lifetime exposure at levels above the MCL.

2.5.5 Barium. Overexposure to barium compounds (e.g. as barium chloride, barium nitrate, or barium sulfate) can irritate the eyes, skin, and upper respiratory system. Skin burns may also occur, as well as slow pulse, hypokalemia, and extrasystoles. The Merck Index (12<sup>TH</sup> Ed., 1996, pg 165, No. 991) states that "All water or acid soluble barium compounds are poisonous!" Target organs include the eyes, skin, heart, the respiratory system, and the central nervous

system.

2.5.6 Cadmium. Potential health affects from an overexposure to cadmium dusts or fumes include headache, chest pains, fever, nausea, and weakness. Cadmium targets the respiratory system, kidneys, and blood, and can cause prostate and lung cancer. Chronic inhalation can cause pulmonary emphysema and chronic bronchitis. Potential toxic effects due to chronic overexposure by inhalation or ingestion are anemia, kidney damage, osteomalacia, and osteoporosis. *Itai-itai* disease is a skeletal disease characterized by progressive bone demineralization with painful joints and bones associated with a cadmium-induced renal disorder. It has been attributed to high oral intake of cadmium in food and water.

2.5.7 Lead. Lead is a known human carcinogen. Lead is also a bioaccumulative substance and can lead to reproductive and developmental disorders. Lead poisoning is one of the most commonly reported occupational diseases among adults due to inhalation of dust and fumes. Some lead compounds are carcinogenic to lungs and kidneys. Possible exposure pathways include ingestion and inhalation. Symptoms develop more quickly through inhalation exposure than ingestion since absorption takes place through the respiratory tract rather quickly. Acute lead poisoning is most common in children with history of pica; symptoms include anorexia, vomiting, malaise, and convulsions due to increased intracranial pressure, which may lead to permanent brain damage. Chronic poisoning effects in children include weight loss, weakness and anemia.

2.5.8 Mercury. Mercury is a known human poison and is readily absorbed via the respiratory tract, intact skin, and gastrointestinal tract. Acute effects include severe nausea, vomiting, abdominal pain, bloody diarrhea, and kidney damage. Death usually occurs within 10 days. Chronic effects include inflammation of the mouth and gums, kidney damage, brain damage, and muscle tremors.

2.5.9 Arsenic. Arsenic is a confirmed human carcinogen producing liver tumors. It is poisonous by subcutaneous, intramuscular, and intraperitoneal routes. Human systemic skin and gastrointestinal effects are observed by ingestion. It has some other reproductive effects. Mutation data is reported.

2.5.10 Chromium. Chromium and certain chromium compounds are listed as known human carcinogens. Overexposure to chromium metal by inhalation can cause histologic fibrosis of the lungs. Chromic acid and chromate salts can be irritating to exposed tissues, with toxic effects including dermatitis, skin ulcers, nasal inflammation, perforation of the nasal septum, and lung, nasal, and paranasal sinus cancer. Target organs include the blood, the respiratory system, liver, kidneys, eyes, and skin. The most significant groundwater and soil problem typically associated with the use of chromium is chromium VI, or hexavalent chromium. Chromium VI is acutely toxic, mutagenic, and carcinogenic in the environment. It is also very soluble, mobile, and moves at essentially the same rate as groundwater.



## 2.6 Routes of Exposure.

2.6.1 People working on the site could be exposed to contaminants via dermal contact or via inhalation of volatile or dust-borne contaminants. Excavation of soil in areas where contamination exists could expose workers to contamination via dermal contact or via inhalation of contaminants, either from soil or groundwater.

2.6.2 If contaminated groundwater migrates, it could potentially result in exposure to workers on adjacent parcels to contaminants via inhalation of volatile contaminants or exposure to contaminants thereof.

2.7 Public Health and/or Environmental Risk. The public at risk includes those people who may work in the two buildings located on the Property, those who excavate into contaminated soil or groundwater, and/or persons who otherwise come into contact with, inhale or ingest contaminated air, soil or groundwater. For example, workers and site occupants may be exposed to these chemicals during trenching activities. The hazardous substances found at the Site include VOCs, which could migrate into indoor air and expose Site occupants to levels of these chemicals above those deemed safe, and metals (in particular hexavalent chromium and lead), which may have impacted groundwater beneath the Site and may be exposed to workers performing subterranean work such as trenching or dewatering. Continued migration of chemicals in soil vapor and groundwater could result in exposure of occupants of property down gradient of the Site to these chemicals. The extent of contamination in groundwater has not been delineated and these chemicals may impact groundwater designated by the RWQCB as a potential drinking water source.

## III. CONCLUSIONS OF LAW

3.1 Respondents are responsible parties as defined by Health and Safety Code section 25323.5.

3.2 Each of the substances listed in Section 2.4 is a "hazardous substance" as defined in Health and Safety Code section 25316.

3.3 There has been a "release" and/or there is a "threatened release" of hazardous substances listed in Section 2.4 at the Site, as defined in Health and Safety Code section 25320.

3.4 The actual and threatened release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and/or to protect and preserve the public health.

#### IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that response action is necessary at the Site because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment because of the release and/or the threatened release of hazardous substances at the Site.

#### V. CONSENT ORDER

Based on the foregoing, IT IS HEREBY AGREED AND ORDERED THAT Respondents conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 All response actions taken pursuant to this Order shall be consistent with the requirements of Chapter 6.8 (commencing with section 25300), division 20 of the Health and Safety Code and any other applicable state or federal statutes and regulations.

5.1.1 Site Remediation Strategy. The purpose of this Order is to require for the Site: implementation of any appropriate removal actions, completion of a Remedial Investigation/Feasibility Study (RI/FS), preparation of a Remedial Action Plan (RAP) or Removal Action Workplan (RAW), preparation of California Environmental Quality Act (CEQA) documents, and Design and Implementation of the remedial actions approved in the RAP. An overall Site investigation and remediation strategy shall be developed by Respondents in conjunction with DTSC that reflects program goals, objectives, and requirements. Current knowledge of the Site contamination sources, exposure pathways, and receptors shall be used in developing this strategy.

An objective of the Site investigations shall be to identify immediate or potential risks to public health and the environment and prioritize and implement response actions using removal actions and operable units, if appropriate, based on the relative risks at the Site. Respondents and DTSC shall develop and possibly modify Site priorities throughout the course of the investigations. If necessary for the protection of public health and the environment, DTSC will require additional response actions not specified in this Order to be performed as removal actions or separate operable units. Removal actions shall be implemented in accordance with a workplan and implementation schedule submitted by Respondents and approved by DTSC.

For operable unit remedial actions, DTSC will specify the separate and focused remedial phase activities to be conducted as RI/FS, RAP or RAW, Design, and Implementation. The focused activities shall be conducted in accordance with the corresponding remedial phase

requirements specified in this Order, but shall only address the area or problem of the operable unit.

5.1.2 Remedial Action Objectives. Based on available information, DTSC has preliminarily determined that the remedial action objectives for the Site shall include:

(a) Existing and potential beneficial uses of groundwater shall be protected. The RWQCB Basin Plan identifies public water supply as a beneficial use of this aquifer. Therefore, drinking water standards or more conservative values determined by a Risk Assessment shall be remedial action objectives for this Site.

(b) The past and the reasonably foreseeable future land use of the Site is industrial. Therefore, if contamination is left in place that would not allow for unrestricted use after site remediation activities have been completed then a land use covenant imposing appropriate limitations on land use shall be executed and recorded.

5.1.3 Removal Actions. Respondents shall undertake removal actions if, during the course of the RI or FS, DTSC determines that they are necessary to mitigate the release of hazardous substances at or emanating from the Site. DTSC may require Respondents to submit a RAW that includes a schedule for implementing the workplan for DTSC's approval. Either DTSC or Respondents may identify the need for removal actions. Respondents shall implement the following removal actions.

5.1.4 Groundwater Monitoring. Respondents shall immediately recommence interim groundwater monitoring in accordance with DTSC's letter, attached as Exhibit C. Groundwater level measurements shall be conducted monthly, commencing the first Monday of May 2007. Groundwater sampling shall be conducted on a quarterly basis commencing May 2007. Subsequent monitoring shall be conducted until DTSC determines it is appropriate to terminate monitoring.

5.1.5 Site Remediation Strategy Meeting. Respondents, including the Project Coordinator (Section 6.1) and Project Engineer/Geologist (Section 6.2), shall meet with DTSC within [20] days from the effective date (and concurrent with the development of the RI/FS workplan) of this Order to discuss the Site remediation strategy. These discussions will include Site risks and priorities; project planning, phasing and scheduling, remedial action objectives, remedial technologies, data quality objectives, and the RI/FS workplan. Results of the discussions will be included in the Scoping Document, Section 5.2.2(b) of this Order.

5.2 Remedial Investigation/Feasibility Study (RI/FS). A RI/FS shall be conducted for the Site. The RI/FS may be performed as a series of focused RI/FSs, if appropriate, based on Site priorities. The RI/FS shall be prepared consistent with the U.S. Environmental Protection Agency's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. The purpose of the RI/FS is to assess Site conditions and to evaluate

alternatives to the extent necessary to select a remedy appropriate for the Site. RI and FS activities shall be conducted concurrently and iteratively so that the investigations can be completed expeditiously. Because of the unknown nature of the Site and iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. Respondents shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of this Order.

The following elements of the RI/FS process and those defined by DTSC in Section 5.1.4 of this Order shall be preliminarily defined in the initial Site scoping and refined and modified as additional information is gathered throughout the RI/FS process.

- (a) Conceptual Site Model identifying contamination sources, exposure pathways, and receptors;
- (b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards;
- (c) Project phasing including the identification of removal actions and operable units;
- (d) General response actions and associated remedial technology types; and
- (e) The need for treatability studies.

5.2.1 RI/FS Objectives. The objectives of the RI/FS are to:

- (a) Determine the nature and full extent of hazardous substance contamination of air, soil, surface water and groundwater at the Site;
- (b) Identify all actual and potential exposure pathways and routes through environmental media;
- (c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare or to the environment posed by the threatened or actual release of hazardous substances at or from the Site;
- (d) Identify and evaluate appropriate response actions to prevent or minimize future releases and mitigate any releases which have already occurred; and
- (e) Collect and evaluate the information necessary to prepare a RAP.

5.2.2 RI/FS Workplan. Within [30] days from the effective date of this Order, Respondents shall prepare and submit to DTSC for review and approval a detailed RI/FS Workplan and implementation schedule which covers all the activities necessary to conduct a complete RI/FS

of the Site.

The RI/FS Workplan shall include a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables which will be submitted to DTSC. Either Respondents or DTSC may identify the need for additional work.

These RI/FS Workplan deliverables are discussed in the remainder of this Section, with a schedule for implementation, and monthly reports. The RI/FS Workplan shall include all the sections and address each component listed below.

(a) Project Management Plan. The Project Management Plan shall define relationships and responsibilities for major tasks and project management items by Respondents, its contractors, subcontractors, and consultants. The plan shall include an organization chart with the names and titles of key personnel and a description of their individual responsibilities.

(b) Scoping Document. The Scoping Document shall incorporate program goals, program management principles, and expectations contained in the National Contingency Plan (NCP) (40 C.F.R. § 300), as amended. It shall include:

(1) An analysis and summary of the Site background and the physical setting. At a minimum, the following information is required:

(A) A map of the Site, and if they exist, aerial photographs and blueprints showing buildings and structures;

(B) A description of past disposal practices;

(C) A list of all hazardous substances which were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at the Site, and a description of their estimated volumes, concentrations, and characteristics;

(D) A description of the characteristics of the hazardous substances at the Site; and

(E) If applicable, a description of all current and past manufacturing processes which are or were related to each hazardous substance.

(2) An analysis and summary of previous response actions including a summary of all existing data including air, soil, surface water, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures which were followed;

(3) Presentation of the Conceptual Site Model;

(4) The scope and objectives of RI/FS activities;

(5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions shall be proposed, if needed, based on the initial evaluation of threats to public health and the environment. If remedial actions involving treatment can be identified, treatability studies shall be conducted during the characterization phase, unless Respondents and DTSC agree that such studies are unnecessary as set forth in Section 5.4; and

(6) If applicable, initial presentation of the Site Remediation Strategy.

(c) Field Sampling Plan. The Field Sampling Plan shall include:

(1) Sampling objectives, including a brief description of data gaps and how the field sampling plan will address these gaps;

(2) Sample locations, including a map showing these locations, and proposed frequency;

(3) Sample designation or numbering system;

(4) Detailed specification of sampling equipment and procedures;

(5) Sample handling and analysis including preservation methods, shipping requirements and holding times; and

(6) Management plan for wastes generated.

(d) Quality Assurance Project Plan. The plan shall include:

(1) Project organization and responsibilities with respect to sampling and analysis;

(2) Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, Respondents shall consider obtaining detection limits at or below potentially applicable legal requirements or relevant and appropriate standards, such as Maximum Contaminant Levels (MCLs) or Maximum Contaminant Level Goals (MCLGs);

(3) Sampling procedures;

(4) Sample custody procedures and documentation;

(5) Field and laboratory calibration procedures;

(6) Analytical procedures;



- (7) Laboratory to be used certified pursuant to Health and Safety Code section 25198;
- (8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;
- (9) Reporting procedure for measurement of system performance and data quality;
- (10) Data management, data reduction, validation and reporting. Information shall be accessible to downloading into DTSC's system; and
- (11) Internal quality control.

(e) Health and Safety Plan. A site-specific Health and Safety Plan shall be prepared in accordance with federal (29 CFR 1910.120) and state (Title 8 CCR Section 5192) regulations. This plan should include, at a minimum, the following elements:

- (1) Site Background/History/Workplan;
- (2) Key Personnel and Responsibilities
- (3) Job Hazard Analysis/Summary;
- (4) Employee Training;
- (5) Personal Protection;-
- (6) Medical Surveillance;
- (7) Air Surveillance;
- (8) Site Control;
- (9) Decontamination;
- (10) Contingency Planning;
- (11) Confined Space Operations;
- (12) Spill Containment;
- (13) Sanitation;
- (14) Illumination; and
- (15) Other applicable requirements based on the work to be performed.

DTSC's Interim Draft Site Specific Health and Safety Plan Guidance Document for Site Assessment/Investigation, Site Mitigation Projects, Hazardous Waste Site Work Closure, Post Closure, and Operation and Maintenance Activities (DTSC, December 2000) can be used as a reference tool.

All contractors and all subcontractors shall be given a copy of the Health and Safety Plan prior to entering the Site. Any supplemental health and safety plans prepared by any subcontractor shall also be prepared in accordance with the regulations and guidance identified above. The prime contractor will be responsible for ensuring that all subcontractor supplemental health and safety plans will follow these regulations and guidelines.



(f) Other Activities. A description of any other significant activities which are appropriate to complete the RI/FS shall be included.

(g) Schedule. A schedule which provides specific time frames and dates for completion of each activity and report conducted or submitted under the RI/FS Workplan including the schedules for removal actions and operable unit activities.

5.2.3 RI/FS Workplan Implementation. Respondents shall implement the approved RI/FS Workplan.

5.2.4 RI/FS Workplan Revisions. If Respondents propose to modify any methods or initiates new activities for which no Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan or other necessary procedures/plans have been established, Respondents shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 Interim Screening and Evaluation of Remedial Technologies. At the request of DTSC, Respondents shall submit an interim document which identifies and evaluates potentially suitable remedial technologies and recommendations for treatability studies.

5.4 Treatability Studies. Treatability testing will be performed by Respondents to develop data for the detailed remedial alternatives. Treatability testing is required to demonstrate the implementability and effectiveness of technologies, unless Respondents can show DTSC that similar data or documentation or information exists. The required deliverables are: a workplan, a sampling and analysis plan, and a treatability evaluation report. To the extent practicable, treatability studies will be proposed and implemented during the latter part of Site characterization.

5.5 Remedial Investigation (RI) Report. The RI Report shall be prepared and submitted by Respondents to DTSC for review and approval in accordance with the approved RI/FS workplan schedule. The purpose of the RI is to collect data necessary to adequately characterize the Site for the purposes of defining risks to public health and the environment and developing and evaluating effective remedial alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondents shall identify the sources of contamination and define the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport shall be evaluated. The RI Report shall contain:

(a) Site Physical Characteristics. Data on the physical characteristics of the Site and surrounding area shall be collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.

(b) Sources of Contamination. Contamination sources (including heavily contaminated media) shall be defined. The data shall include the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.

(c) Nature and Extent of Contamination. Contaminants shall be identified and the horizontal and vertical extent of contamination shall be defined in soil, groundwater, surface water, sediment, air, and biota. Spatial and temporal trends and the fate and transport of contamination shall be evaluated.

5.6 Baseline Health and Ecological Risk Assessment. Respondents shall perform health and ecological risk assessments for the Site that meet the requirements of Health and Safety Code section 25356.1.5(b). Respondents shall submit a Baseline Health and Ecological Risk Assessment Report within [60] days from the submittal of the RI Report. The report shall be prepared consistent with U.S. EPA and DTSC guidance and regulations, including as a minimum: Risk Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual, December 1989; Superfund Exposure Assessment Manual, April 1988; Risk Assessment Guidance for Superfund, Volume 2, Environmental Evaluation Manual, March 1989; Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (DTSC, September 1993); and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S.EPA pursuant to 40 C.F.R. part 300.400 et seq. The Baseline Health and Ecological Risk Assessment Report shall include the following components:

(a) Contaminant Identification. Characterization data shall identify contaminants of concern for the risk assessment process.

(b) Environmental Evaluation. An ecological assessment consisting of:

(1) Identification of sensitive environments and rare, threatened, or endangered species and their habitats; and

(2) As appropriate, ecological investigations to assess the actual or potential effects on the environment and/or develop remediation criteria.

(c) Exposure Assessment. The objectives of an exposure assessment are to identify actual or potential exposure pathways, to characterize the potentially exposed populations, and to determine the extent of the exposure. Exposed populations may include industrial workers, residents, and subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations, that are identifiable as being at greater risk of adverse health effects due to exposure to

hazardous substances than the general population.

(d) Toxicity Assessment. Respondents shall evaluate the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans.

(e) Risk Characterization. Risk characterization shall include the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.7 Feasibility Study (FS) Report. The FS Report shall be prepared and submitted by Respondents to DTSC for review and approval, no later than [60] days from submittal of the RI Report. The FS Report shall summarize the results of the FS including the following:

- (a) Documentation of all treatability studies conducted.
- (b) Development of medium specific or operable unit specific remedial action objectives, including legal requirements and other promulgated standards that are relevant.
- (c) Identification and screening of general response actions, remedial technologies, and process options on a medium and/or operable unit specific basis.
- (d) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria:

- (1) Overall protection of human health and the environment.
- (2) Compliance with legal requirements and other promulgated standards that are relevant.

Primary Balancing Criteria:

- (1) Long-term effectiveness and permanence.
- (2) Reduction of toxicity, mobility, or volume through treatment.
- (3) Short-term effectiveness.
- (4) Implementability based on technical and administrative feasibility.

(5) Cost.

Modifying Criteria:

(1) State and local agency acceptance.

(2) Community acceptance.

(e) Proposed remedial actions.

5.8 Public Participation Plan (Community Relations). Respondents shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response actions. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25356.1 and 25358.7 and DTSC's most current Public Participation Policy and Guidance Manual, and shall be subject to DTSC's review and approval.

Respondents, in coordination with DTSC, shall conduct a baseline community survey and develop a Public Participation Plan (PPP) which describes how, under this Order, the public and adjoining community will be kept informed of activities conducted at the Site and how Respondents will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

- (a) Develop proposed list of interviewees;
- (b) Schedule and conduct community interviews; and
- (c) Analyze interview notes, and develop objectives.

Respondents shall conduct the baseline community survey and submit the PPP for DTSC's review within [40] days of the effective date of this Order.

Respondents shall implement any of the public participation support activities identified in the PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

5.9 California Environmental Quality Act (CEQA). DTSC must comply with CEQA insofar as activities required by this Order are projects requiring CEQA compliance. Upon DTSC request, Respondents shall submit any information deemed necessary by DTSC to facilitate compliance with CEQA. The costs incurred by DTSC in complying with CEQA are response costs and Respondents shall reimburse DTSC for such costs pursuant to Section 6.19.

5.10 Removal Action Workplan

If DTSC determines a removal action is appropriate, Respondents will prepare a Removal Action Workplan (RAW) in accordance with Health and Safety Code sections 25323.1 and



25356.1. The Removal Action Workplan will include:

- (a) a description of the onsite contamination;
- (b) the goals to be achieved by the removal action;
- (c) an analysis of the alternative options considered and rejected and the basis for that rejection. This should include a discussion for each alternative which covers its effectiveness, implementability and cost;
- (d) administrative record list;
- (e) a description of the techniques and methods to be used in the removal action, including any excavating, storing, handling, transporting, treating, and disposing of material on or off the site;
- (f) Sampling and Analysis Plan with corresponding Quality Assurance Plan to confirm the effectiveness of the RAW, if applicable;
- (g) a brief overall description of methods that will be employed during the removal action to ensure the health and safety of workers and the public during the removal action. A detailed community air monitoring plan shall be included if requested by DTSC.

In conjunction with DTSC, Respondents shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondents shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAW. Respondents shall modify the document in accordance with DTSC's specifications and submit a final RAW within [15] days of receipt of DTSC's comments.

If the proposed removal action does not meet the requirements of Health and Safety Code section 25356.1(h), the Respondents will prepare a Remedial Action Plan (RAP) in accordance with Health and Safety Code section 25356.1(c) for DTSC review and approval.

5.11 Remedial Action Plan (RAP). No later than [30] days after DTSC approval of the FS Report, Respondents shall prepare and submit to DTSC a draft RAP. The draft RAP shall be consistent with the NCP and Health and Safety Code section 25356.1. The draft RAP public review process may be combined with that of any other documents required by CEQA. The draft RAP shall be based on and summarize the approved RI/FS Reports, and shall clearly set forth:

- (a) Health and safety risks posed by the conditions at the Site.
- (b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources.
- (c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses.
- (d) Site specific characteristics, including the potential for offsite migration of hazardous substances, the surface or subsurface soil, and the hydro geologic conditions, as well as preexisting background contamination levels.
- (e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost.
- (f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce their volume, toxicity, or mobility prior to disposal.
- (g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement shall include an evaluation of each proposed alternative submitted and evaluate the consistency of the removal and remedial actions proposed by the plan with the NCP.
- (h) A schedule for implementation of all proposed removal and remedial actions.

In conjunction with DTSC, Respondents shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondents shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. Respondents shall modify the document in accordance with DTSC's specifications and submit a final RAP within [15] days of receipt of DTSC's comments.

5.12 Remedial Design (RD). Within [60] days after DTSC approval of the final RAP, Respondents shall submit to DTSC for review and approval a RD describing in detail the technical and operational plans for implementation of the final RAP which includes the following elements, as applicable:

- (a) Design criteria, process unit and pipe sizing calculations, process diagrams, and final

plans and specifications for facilities to be constructed.

(b) Description of equipment used to excavate, handle, and transport contaminated material.

(c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP.

(d) A transportation plan identifying routes of travel and final destination of wastes generated and disposed.

(e) For groundwater extraction systems: aquifer test results, capture zone calculations, specifications for extraction and performance monitoring wells, and a plan to demonstrate that capture is achieved.

(f) An updated health and safety plan addressing the implementation activities.

(g) Identification of any necessary permits and agreements.

(h) An operation and maintenance plan including any required monitoring.

(i) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.

(j) A community air monitoring plan.

5.13 Land Use Covenant. If the approved remedy in the final RAP or final RAW includes land use restrictions, pursuant to California Code of Regulations, title 22, section 67391.1, the current owner(s) of the Site or a portion of the Site subject to such restrictions shall sign and record a Covenant to Restrict Use of Property approved by DTSC within [90] days of DTSC's approval of the final RAP or final RAW or as otherwise requested by DTSC.

5.14 Implementation of Final RAP or Final RAW. Upon DTSC approval of the RD or RAW, Respondents shall implement the final RAP or final RAW in accordance with the approved schedule in the RD or final RAW. Within [30] days of completion of field activities, Respondents shall submit an Implementation Report documenting the implementation of the final RAP and RD or final RAW.

5.15 Operation and Maintenance (O&M). Respondents shall comply with all O&M requirements in accordance with the final RAP and approved RD or final RAW. Within [30] days of the date of DTSC's request, Respondents shall prepare and submit to DTSC for approval an O&M workplan that includes an implementation schedule. Respondents shall implement the



workplan in accordance with the approved schedule. Respondents shall enter into an O&M Agreement, including financial assurance pursuant to California Health and Safety Code section 25355.2, with DTSC within [30] days of the date of DTSC's request.

5.16 Five-Year Review. Respondents shall review and reevaluate the remedial action after a period of [5] years from the completion of construction and startup, and every [5] years thereafter or after completion of a RAW, if applicable. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty (30) calendar days before the end of the time period approved by DTSC to review and reevaluate the remedial action, Respondents shall submit a remedial action review workplan to DTSC for review and approval. Within sixty (60) days of DTSC's approval of the workplan, Respondents shall implement the workplan and shall submit a comprehensive report of the results of the remedial action review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondents and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment. As a result of any review performed under this Section, Respondents may be required to perform additional work or to modify work previously performed.

5.17 Changes During Implementation of the Final RAP or Final RAW. During the implementation of the final RAP and RD or final RAW, DTSC may specify such additions, modifications, and revisions to the RD or final as DTSC deems necessary to protect public health and safety or the environment or to implement the final RAP or final RAW.

5.18 Stop Work Order. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondents to stop further implementation of this Order for such period of time needed to abate the endangerment. In the event that DTSC determines that any site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondents to stop further implementation of this Order or activity for such period of time needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work Order, under this Section, shall be extended for the term of the Stop Work Order.

5.19 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance) during the course of this Order, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondents shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within [7] days of the onset of such an event, Respondents shall furnish a report to DTSC, signed by Respondents' Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto. In the

event that Respondents fail to take appropriate response and DTSC takes the action instead, Respondents shall be liable to DTSC for all costs of the response action. Nothing in this Section shall be deemed to limit any other notification requirement to which Respondents may be subject.

5.20 Discontinuation of Remedial Technology. Any remedial technology employed in implementation of the final RAP or final RAW shall be left in place and operated by Respondents until and except to the extent that DTSC authorizes Respondents in writing to discontinue, move or modify some or all of the remedial technology because Respondents have met the criteria specified in the final RAP or final RAW for its discontinuance, or because the modifications would better achieve the goals of the final RAP or final RAW.

5.21 Financial Assurance. Respondents shall demonstrate to DTSC and maintain financial assurance for O&M and monitoring. Respondents shall demonstrate financial assurance prior to the time that O&M activities are initiated and shall maintain it throughout the period of time necessary to complete all required O&M activities. The financial assurance mechanisms shall meet the requirements of Health and Safety Code section 25355.2. All financial assurance mechanisms are subject to the review and approval of DTSC.

## VI. GENERAL PROVISIONS

6.1 Project Coordinator. Within [10] days from the date this Order is signed by DTSC, Respondents shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondents shall promptly notify DTSC of any change in the identity of the Project Coordinator. Respondents shall obtain approval from DTSC before the new Project Coordinator performs any work under this Order.

6.2 Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or a professional geologist in the State of California, with expertise in hazardous substance site cleanups. Within [15] calendar days from the date this Order is signed by DTSC, Respondents must submit: a) the name and address of the project engineer or geologist chosen by Respondents; and b) in order to demonstrate expertise in hazardous substance cleanup, the resumé of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondents shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondents shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.3 Monthly Summary Reports. Within [30] days from the date this Order is signed by DTSC, and on a monthly basis thereafter, Respondents shall submit a Monthly Summary Report of its activities under the provisions of this Order. The report shall be received by DTSC by the [15th] day of each month and shall describe:

- (a) Specific actions taken by or on behalf of Respondents during the previous calendar month;
- (b) Actions expected to be undertaken during the current calendar month;
- (c) All planned activities for the next month;
- (d) Any requirements under this Order that were not completed;
- (e) Any problems or anticipated problems in complying with this Order; and
- (f) All results of sample analyses, tests, and other data generated under this Order during the previous calendar month, and any significant findings from these data.

6.4 Quality Assurance/Quality Control (QA/QC). All sampling and analysis conducted by Respondents under this Order shall be performed in accordance with QA/QC procedures submitted by Respondents and approved by DTSC pursuant to this Order.

6.5 Submittals. All submittals and notifications from Respondents required by this Order shall be sent simultaneously to:

Sayareh Amirebrahimi, Branch Chief  
Southern California-Cleanup Operations Division  
Attention: Michel Iskarous [two copies]  
Site Mitigation & Brownfield Reuse Program  
Department of Toxic Substances Control  
1011 N. Grandview Avenue  
Glendale, California 91201

U.S. EPA, Region IX  
Attn: Superfund Program Manager  
75 Hawthorne Street  
San Francisco, California 94105

6.6 Communications. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondents in writing by the Site Mitigation Branch Chief, DTSC, or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondents shall be construed to relieve Respondents of the obligation to obtain such formal approvals as may be required.

6.7 DTSC Review and Approval. (a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondents shall submit all deliverables required by



this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.

(1) If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

- (a) Modify the document as deemed necessary and approve the document as modified; or
- (b) Return comments to Respondents with recommended changes and a date by which Respondents must submit to DTSC a revised document incorporating the recommended changes.
- (c) Any modifications, comments or other directives issued pursuant to (a) or (b) above, are incorporated into this Order. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 Compliance with Applicable Laws. Nothing in this Order shall relieve Respondents from complying with all other applicable laws and regulations, including but not limited to compliance with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control Board. Respondents shall conform all actions required by this Order with all applicable federal, state and local laws and regulations.

6.9 Respondents Liabilities. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondents. Nothing in this Order is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to limit or preclude DTSC from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Order, Respondents may be required to take further actions as are necessary to protect public health and the environment.

6.10 Site Access. Access to the Site and laboratories used for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this Section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of Respondents in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by Respondents.

To the extent the Site or any other property to which access is required for the implementation of this Order is owned or controlled by persons other than Respondents, Respondents shall use best efforts to secure from such persons access for Respondents, as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. To the extent that any portion of the Site is controlled by tenants of Respondents, Respondents shall use best efforts to secure from such tenants, access for Respondents, as well as for DTSC, its representatives, and contractors, as necessary to effectuate this Order. For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within forty-five (45) days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondents in writing that additional access beyond that previously secured is necessary, Respondents shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondents have taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondents in obtaining access. Respondents shall reimburse DTSC in obtaining access, including, but not limited to, attorneys fees and the amount of just compensation.

6.11 Site Access for Respondents. The Site owner Respondents shall grant access to other Respondents who are in compliance with this Order for the purpose of conducting activities pursuant to this Order or for activities deemed necessary by DTSC to meet the objectives of this Order.

6.12 Sampling, Data and Document Availability. Respondents shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondents or on Respondents' behalf in any way pertaining to work undertaken pursuant to this Order. Respondents shall submit all such data upon the request of DTSC. Copies shall be provided within [7] days of receipt of DTSC's written request. Respondents shall inform DTSC at least [7] days in advance of all field sampling under this Order, and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondents pursuant to this Order. Respondents shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.13 Record Retention. All such data, reports and other documents shall be preserved by Respondents for a minimum of ten years after the conclusion of all activities under this Order. If DTSC requests that some or all of these documents be preserved for a longer period of time, Respondents shall either comply with that request or deliver the documents to DTSC, or provide DTSC copies of the documents prior to destruction. Respondents shall notify DTSC in writing, at least six months prior to destroying any documents prepared pursuant to this Order.

6.14 Government Liabilities. The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondents, or related parties specified in Section 6.26, Parties Bound, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondents or

its agents in carrying out activities pursuant to this Order.

6.15 Additional Actions. By issuance of this Order, DTSC does not waive the right to take any further actions authorized by law.

6.16 Extension Requests. If Respondents are unable to perform any activity or submit any document within the time required under this Order, Respondents may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.17 Extension Approvals. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondents shall comply with the new schedule incorporated in this Order.

6.18 Liability for Costs. Respondents are liable for all of DTSC's costs that have been incurred in taking response actions at the Site (including costs of overseeing response actions performed by Respondents) and costs to be incurred in the future.

6.19 Payment of Costs. DTSC may bill Respondents for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondents quarterly for its response costs incurred after the effective date of this Order. Respondents shall pay DTSC within sixty [60] days of receipt of any DTSC billing. Any billing not paid within sixty [60] days is subject to interest calculated from the date of the billing pursuant to Health and Safety Code section 25360.1. All payments made by Respondents pursuant to this Order shall be by cashier's or certified check made payable to "DTSC," and shall bear on the face the project code of the Site (301286) and the Docket number of this Order. Payments shall be sent to:

Department of Toxic Substances Control  
Accounting/Cashier  
1001 I Street, 21<sup>st</sup> Floor  
P.O. Box 806  
Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittals under this Order.

6.20 Severability. The requirements of this Order are severable, and Respondents shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.21 Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondents pursuant to this Order are incorporated in this Order upon DTSC's approval or as modified pursuant to Section 6.7, DTSC.

Review and Approval, and shall be implemented by Respondents. Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.22 Modifications. DTSC reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.23 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.24 Termination and Satisfaction. Except for Respondents obligations under Sections 5.15 Operation and Maintenance (O&M), 5.16 Five-Year Review, 5.21 Financial Assurance, 6.13 Record Retention, 6.18 Liability for Costs, and 6.19 Payment of Costs, Respondents' obligations under this Order shall terminate and be deemed satisfied upon Respondents receipt of written notice from DTSC that Respondents have complied with all the terms of this Order.

6.25 Calendar of Tasks and Schedules. This Section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this Section and the date within the Section describing the specific requirement, the latter shall govern.

#### **Calendar of Tasks and Schedules**

<u>TASK</u>	<u>SCHEDULE</u>
1. Identify Project Coordinator; Section 6.1;	Within [10] days from the date this Order is signed by DTSC.
2. Identify Project Engineer/Geologist; Section 6.2;	Within [15] days from the date this Order is signed by DTSC.
3. Submit Monthly Summary Reports; Section 6.3;	Within [30] days from the date this Order is signed by DTSC.
4. Attend Site Remediation Strategy Meeting; Section 5.1.7;	Within [20] days from the date this Order is signed by DTSC.
5. Submit groundwater level measurements;	First Monday of specified month.



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| Groundwater sampling results;<br>Section 5.1.5;                   | Quarterly basis.  |
| 6. Submit RI/FS Workplan; Section 5.2.2.                          | Within [30] days of the effective date of this Order.   |
| 7. Submit interim screening and evaluation document; Section 5.3; | As requested by DTSC.   |
| 8. Submit Treatability Studies; Section 5.4;                      | As required during Site characterization or as requested by DTSC.   |
| 9. Submit RI Report; Section 5.5;                                 | Per approved RI/FS Workplan Schedule.   |
| 10. Submit Baseline Risk Assessment; Section 5.6;                 | Within [60 days] or as required from submittal of RI Report.  |
| 11. Submit FS Report; Section 5.7;                                | Within [60] days from submittal of RI Report.   |
| 12. Submit Public Participation Plan; Section 5.8;                | Within [40] days from the date this Order is signed by DTSC.  |
| Submit and distribute Fact Sheets;                                | For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC. |
| 13. Submit Initial Study and Checklist; Section 5.9;              | Within [30] days after approval of FS Report.   |
| 14. Submit Draft RAW or Draft RAP; Section 5.10 or 5.11;          | Within [30] days after approval of FS Report.   |
| Submit information needed to prepare the Responsiveness Summary;  | Within [10] days of DTSC request.   |
| Submit Final RAP or Final RAW;                                    | Within [15] days of receipt of DTSC's comments.   |
| 15. Submit Remedial Design; Section 5.12;                         | Within [60] days after DTSC's approval of the Final RAP.  |

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| 16. Land Use Covenant;<br>Section 5.13;  | Within [90] days of approval of Final<br>RAP or Final RAW.   |
| 17. Submit Implementation Report;<br>Section 5.14;   | Within [30] days of completion of field<br>activities.   |
| 18. Operation and Maintenance<br>Section 5.15;   |  |
| Submit O&M plan  | Within [30] days of DTSC's request.  |
| Sign O&M Agreement   | Within [30] days of DTSC's request   |
| 19. Submit Remedial Action Review<br>Workplan; Section 5.16;   | Within [30] days before end of five-year<br>period.  |
| 20. Submit Emergency Response Action<br>Report; Section 5.19;  | Within [7] days of an emergency response action.   |
| 21. Provide copies of sampling, data, and<br>documentation;<br>Section 6.12;   | Within [7] days of receipt of DTSC's<br>request.   |
| Provide prior notice before conducting<br>field sampling;  | Inform DTSC [7] days in advance of<br>sampling.  |
| 22. Maintain central depository of data,<br>reports, documentation; and  | Maintain central depository for a<br>minimum of ten years after conclusion<br>of all activities conducted pursuant to<br>this Order. |
| 23. Provide prior written notice to<br>DTSC before destroying any<br>documentation prepared pursuant<br>to this Order; Section 6.13. | At least six months prior to destroying any<br>any documents.  |

**6.26 Parties Bound.** This Order applies to and is binding upon Respondents, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondents shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this Order, within [15] days after the effective date of this Order or the date of retaining their services, whichever is later. Respondents shall condition any such contracts upon

satisfactory compliance with this Order. Notwithstanding the terms of any contract, Respondents are responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.27 Change in Ownership. No change in ownership or corporate or partnership status relating to the Site shall in any way alter Respondents' responsibility under this Order. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect Respondents' obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondents shall be responsible for and liable for any failure to carry out all activities required of Respondents by the terms and conditions of this Order, regardless of Respondents' use of employees, agents, contractors, or consultants to perform any such tasks. Respondents shall provide a copy of this Order to any subsequent owners or successors before ownership rights or stock or assets in an corporate acquisition are transferred.

6.28. Dispute Resolution. The parties agree to use their best efforts to resolve all disputes informally. The parties agree that the procedures contained in this Section are the required administrative procedures for resolving disputes arising under this Order. If Respondents fail to follow the procedures contained in this Section, it shall have waived its right to further contest the disputed issue. Respondents reserve their legal rights to contest or defend against any final decision rendered by DTSC under this Section. Disputes regarding DTSC billings shall follow the procedures set forth in Section 6.28.3

6.28.1. Respondents shall first seek resolution with DTSC's assigned project manager and unit chief. If the issue is not resolved after review by the unit chief, Respondents shall seek resolution with the DTSC branch chief by presenting in a letter the issues in dispute, the legal or other basis for Respondents' position, and the remedy sought. The branch chief shall issue a written decision with an explanation for the decision within thirty (30) business days after receipt of the letter from Respondents.

6.28.2. If Respondents disagree with the branch chief's decision, Respondents may appeal to the Statewide Cleanup Operations Division Chief. To appeal to the division chief, Respondents must prepare a letter stating the reasons why the branch chief's decision is not acceptable. Attached to the letter shall be (a) Respondents' original statement of dispute, (2) supporting documents, and (3) copies of any responses prepared by the project manager, unit chief, and branch chief. This letter and attachments shall be sent to the division chief within ten [10] business days from the date of Respondents' receipt of the branch chief's response. The division chief or designee shall review Respondents' letter and supporting documents, consider the issues raised and render a written decision to Respondents within thirty [30] business days of receipt of Respondents' letter. The decision of the division chief, or designee, shall constitute DTSC's administrative decision on the issues in dispute.

6.28.3. If Respondents dispute a DTSC billing, or any part thereof, Respondents shall notify

DTSC's assigned project manager and attempt to informally resolve the dispute with DTSC's project manager and branch chief. If Respondents desire to formally request dispute resolution with regard to the billing, Respondents shall file a request for dispute resolution in writing within [45] days of the date of the billing in dispute. The written request shall describe all issues in dispute and shall set forth the reasons for the dispute, both factual and legal. If the dispute pertains only to a portion of the costs included in the invoice, Respondents shall pay all costs which are undisputed in accordance with Section 6.19. The filing of a notice of dispute pursuant to this Section shall not stay the accrual of interest on any unpaid costs pending resolution of the dispute. The written request shall be sent to:

Special Assistant for Cost Recovery and Reimbursement Policy  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

A copy of the written request for dispute resolution shall also be sent to the person designated by DTSC to receive submittals under this Order. A decision on the billing dispute will be rendered by the Special Assistant for Cost Recovery and Reimbursement Policy or other DTSC designee.

6.28.4. The existence of a dispute shall not excuse, stay, or suspend any other compliance obligation or deadline required pursuant to this Order.

#### VII. EFFECTIVE DATE

7. The effective date of this Order shall be the date on which this Order is signed by the Parties.

#### VIII. PENALTIES FOR NONCOMPLIANCE

8. Each Respondent may be liable for penalties of up to \$25,000 for each day out of compliance with any term or condition set forth in this Order and for punitive damages up to three times the amount of any costs incurred by DTSC as a result of Respondent's(s') failure to comply, pursuant to Health and Safety Code sections 25359, 25359.2, 25359.4, and 25367(c). Health and Safety Code section 25359.4.5 provides that a responsible party who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from Respondents who fail or refuse to comply with this Order without sufficient cause.

#### IX. SIGNATORIES

9. Each undersigned representative of the parties to this Order certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to execute and legally bind the Parties to this Order.



9.1 This Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

IT IS HEREBY AGREED AND ORDERED.

DATE: \_\_\_\_\_  
[Respondent]

DATE: \_\_\_\_\_  
Sayareh Amirebrahimi, Branch Chief  
Southern California Cleanup Operations Division  
Glendale Branch

cc: Site Mitigation Program  
Headquarters, Planning & Policy  
Office of Legal Counsel